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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,580	02/09/2001	Gerard Hotier	PET1913	5248
23599	7590	11/19/2003	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,580

Applicant(s)

HOTIER ET AL.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16 and 18-23 is/are rejected.
- 7) ☒ Claim(s) 14, 15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-12, 16, 22 and 23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The term “a flow section S₂ of means” (claim 4, line 7) is vague and indefinite as to the limitation intended. Claims 5-9 and 22 depend from claim 4, and are therefore also vague and indefinite. The term “cutout, zone” (claim 10, line 3) is vague, and indefinite as to the structural element intended. Claims 11, 12 and 16 depend from claim 10, and are therefore also indefinite. Claim 11 is further indefinite because it is not clear which drawing element(s) are intended by the term “...” (line 3). Similarly, the term “(C_i,” as recited at the end of claim 23 is vague, and indefinite as to the drawing element intended.

Claim 13 is objected to because the term “arrange above said upper grid” does not appear to be grammatically correct. Applicant should change “arrange” to “arranged” in the above note expression. Also, Applicant is advised that should claim 19 be found allowable, then claim 20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. See M.P.E.P. § 706.03(k).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 13, 18-21 and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by French Patent No. 2,772,634. The reference discloses a simulated moving bed process and apparatus of the type recited, and further shows (see Fig. 1) a bypass line (e.g. $L_{1,2}$) having an end connected to a distribution chamber (i.e. 13), and another end connected to a "zone" of an adsorbent bed (i.e. chamber 23) which is distinct from the first chamber 13; and this is all that is required by claims 1-3, 13, 18-21 and 23. Applicant should note that these claims merely require that one end of the bypass line be connected to a "zone" of the adsorbent bed which is different from a chamber (i.e. connected to a second end of the bypass line), but do not preclude the presence of another chamber in this recited "zone."

Claims 1-3, 13, 18-21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hotier et al. (U.S. Patent No. 5,972,224) or Ferschneider et al. (U.S. Patent No. 6,146,537). Each of the references discloses a system for separating paraxylene from aromatic hydrocarbons of the type recited (see col. 9, line 54 of Hotier et al.; and col. 8, lines 22-23 of Ferschneider et al.) with a simulated moving bed system comprising a bypass line (e.g. $L_{1,2}$ of Hotier et al.; and $L_{i,j}$ of Ferschneider et al.) and a rotary valve (see col. 10, line 26 of Hotier et al.; and col. 9, line 1 of Ferschneider et al.). Again Applicant should note that the bypass line in each of these references includes one end connected to a distribution chamber (13 of Hotier et al.; and CH_i of Ferschneider et al.), and a second end connected to a "zone" of an adsorbent bed (i.e. chamber 23 of Hotier et al.; and CH_j of Ferschneider et al.) which is distinct from the first chamber; and this is all that is required by claims 1-3, 13, 18-21 and 23.

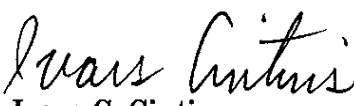
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Claims 14, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claims 4-12, 16 and 22 would also be allowed if amended to overcome the above rejection under 35 U.S.C. § 112, and if further rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (703) 308-1261.

The centralized facsimile number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.


Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
November 16, 2003